

MODIS IOT Weekly Report

Mission Operations Days: 2000/037 to 2000/043

February 5, 2000 20:00:00 GMT to February 12, 2000 20:00:00 GMT

Terra Spacecraft and MODIS Instrument Status:

Terra (AM-1) is in Normal Mode

MODIS is in Safe Mode

MODIS has no known Anomalies

Blackbody	On	Nominal
Calibration Electronics	On	Nominal
Control Processor	B On; A off	Nominal
Door: Nadir	Unlatched, closed	Nominal
Space View	Unlatched, open	Nominal
Solar Diffuser	Unlatched, closed	Nominal
FDDI Formatter	Off	Nominal
FIFO Memory	Off	Nominal
Format Processor	Off	Nominal
PC FPA	Off	Nominal
Power Supply: 1	Off	Nominal
2	On	Nominal
PV FPAs: VIS	Off	Nominal
NIR	Off	Nominal
SMIR	Off	Nominal
LWIR	Off	Nominal
Radiative Cooler:		
Outgas Heaters	Off	Nominal
LWIR FPA Heater	Off	Nominal
SMIR FPA Heater	Off	Nominal
Scan Assembly	Off	Nominal
SDSM	Off	Nominal
SRCA	Off	Nominal
Survival Heaters: PS1	Enabled	Nominal
PS2	Enabled	Nominal
Timing Generator	A Off, B On	Nominal
Flight Software	Rev BD	Nominal
Inhibit Ids Set	31,32,33,53,58	BB, CE, CP, SDSM, SD
TMONs enabled	None	Nominal

This Week's Completed MODIS Activities:

042/15:44 Real time - - Transition to Standby A Mode from Safe Mode
042/15:47 Real time - - SVD to Open from Closed
042/15:51 Real time - - Transition to Science B Mode from Standby Mode

042/16:34 Real time - - First science data dump – three uncorrectable EDU errors, expected only two. This was caused by starting with an empty SSR buffer.

042/17:25 ATC - - PV Ecal did not occur because the inhibit ID for CP was still set.

042/19:01:35 Real time - - PV Ecal run via real-time procedure, macro 25

042/19:04:09 Real time - - PV Ecal macro 25 complete

042/19:05 Real time - - BB on to 315K, B-side (setpoint = 141)

042/19:07 Real time - - BB temp set to 285K (setpoint = 1703)

042/20:45 Real time - - SDD opened to screened position, step = 1069

042/20:50 Real time - - SDD closed, step = 0

042/20:55 Real time - - Microprocessor dump of door table

042/22:17:40 Real time - - SDD fully opened, step = 2151

042/22:26:32 Real time - - SDD fully close, step = 0

042/22:29 Real time - - Microprocessor dump of door table

043/12:26 - Replay of data was not done because buffer had already overwritten it. There will be a data gap here abouts.

043/14:24 - Replay of data was not done because buffer had already overwritten it. There will be a data gap here abouts.

This Week's Scheduled MODIS Activities Not Completed:

None.

Upcoming MODIS Events:

043/20:41 - 150s orbit attainment burn

044/16:48 Real time - - Turn off MODIS

Real time - - Turn on MODIS on A-side

Real time - - Transition to Science Mode on A-Side

044/18:17 Real time - - SDSM functional test

044/18:30 Real time - - Reset Inhibit Ids 31, 32, 33, 53, 58

044/20:43:21 ATC - - OA13: EDS to support OA16 begins

044/20:43:25 ATC - - OA16: SD/SDSM Screened start

044/21:01:18 ATC - - OA16: SD/SDSM Screened end

044/21:01:22 ATC - - OA13: EDS to support OA16 ends

044/21:15:00 ATC - - OA28: PC Electronics Calibration start

044/21:19:31 ATC - - OA28: PC Electronics Calibration end

044/21:20:00 ATC - - OA27: PV Electronics Calibration start

044/21:22:31 ATC - - OA27: PV Electronics Calibration end

044/22:10 Real time - - Set BB duty cycle to 100%

044/22:21:39 ATC - - OA13: EDS to support OA15 begins

044/22:21:41 ATC - - OA15: SD/SDSM Open start

044/22:39:36 ATC - - OA15: SD/SDSM Open end

044/22:39:40 ATC - - OA13: EDS to support OA15 ends

045/17:00 ATC - - OA26: BB On to 315K at 100% duty cycle

045/20:12 - 300s orbit attainment burn

046/01:00	ATC - - Blackbody turn off
046/14:00	Real time - - Set BB duty cycle to 33%
046/15:00	Real time - - SRCA 1W functional (PC17)
046/17:00	ATC - OA26: BB to 315K at 33% duty cycle
047/01:00	ATC - Blackbody turn off
047	ATC - SD/SDSM Screened
047	ATC - SD/SDSM Screened
047/14:30:00 – 15:03:33	ATC - - SRCA Full Radiometric
047	ATC - SD/SDSM Open
047/19:46	- 300s orbit attainment burn
048/14:43:00 – 15:40:31	ATC - - SRCA Full Spatial
049/21:52	- 300s orbit attainment burn
047	ATC - SD/SDSM Screened
047	ATC - SD/SDSM Screened
047	ATC - - SRCA Full Spectral
047	ATC - SD/SDSM Open

MODIS Anomalies:

None.

General Instrument Comments:

MODIS is in Science Mode on the B-side with the SVD open and BB heating to 285K. Solar Diffuser Door opened to the screened and full open position nominally. (And there was much rejoicing!)

Orbit attainment burns are proceeding nominally.

MODIS Telemetry Trends:

Telemetry is nominal.

Non-MODIS Significant Events:

041/21:15	- 60s orbit attainment burn
043/12:26	- Replay of data was not done because buffer had already overwritten it. There will be a data gap hereabouts.
043/14:24	- Replay of data was not done because buffer had already overwritten it. There will be a data gap hereabouts.

The following is the currently planned burn schedule to place Terra into her final orbit (the times are in GMT). Note that these times have been updated since yesterday's report.

Data loss is expected around every burn.

Burn | Start Time | End Time | Duration(sec)

1		Feb 10 2000 21:15:43.030		Feb 10 2000 21:16:43.030		60.000 (complete)
2		Feb 12 2000 20:43:22.876		Feb 12 2000 20:45:52.876		150.000
3		Feb 14 2000 20:12:16.920		Feb 14 2000 20:17:16.920		300.000
4		Feb 16 2000 19:46:07.615		Feb 16 2000 19:51:07.615		300.000
5		Feb 18 2000 21:52:50.413		Feb 18 2000 21:57:50.413		300.000
6		Feb 20 2000 19:04:11.675		Feb 20 2000 19:09:11.675		300.000
7		Feb 22 2000 21:18:02.752		Feb 22 2000 21:23:02.752		300.000
8		Feb 24 2000 20:15:24.276		Feb 24 2000 20:16:24.276		60.000

Limited Life Item Status:

All limited life items are well within lifetime ranges. The precise statistics for each item have been received from LMMS/Valley Forge and will be incorporated next week.